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DATE MAILED: 05/18/2010

# NOTICE OF ALLOWANCE AND FEE(S) DUE

7055 7590 05/18/2010 GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191 EXAMINER
BRISTOL, LYNN ANNE
ART UNIT PAPER NUMBER

 APPLICATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
 ATTORNEY DOCKET NO.
 CONFIRMATION NO.

 10/577,343
 03/05/2007
 Yasubaru Nishimura
 P29875
 4864

TITLE OF INVENTION: DIAGNOSITIC AGENT FOR MALIGNANT MELANOMA

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	08/18/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

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appropriate. All further indicated unless corrects maintenance fee notifica	correspondence includir ed below or directed oth	ng the Patent, advance on herwise in Block 1, by (a	rders and notification of r a) specifying a new corres	naintenance fees wi spondence address;	ill be i and/or	nailed to the current (b) indicating a sepa	correspondence address as arate "FEE ADDRESS" for
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APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
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BRISTOL, L	YNN ANNE	I643	435-006000	J			
"Fee Address" ind PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A	ondence address (or Cha B/122) attached. ication (or "Fee Address 22 or more recent) attach ND RESIDENCE DATA	nge of Correspondence "Indication form ed. Use of a Customer A TO BE PRINTED ON 2	2. For printing on the p (1) the names of up to or agents OR, alternativ (2) the name of a singl registered attorney or a 2 registered patent atto listed, no name will be THE PATENT (print or typ data will appear on the p T a substitute for filing an	3 registered patent vely, e firm (having as a agent) and the name meys or agents. If n printed.	attorn membe s of up so nam	era 2 o to e is 3	ocument has been filed for
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<ol> <li>Change in Entity Sta</li> <li>a. Applicant claim</li> </ol>	tus (from status indicated s SMALL ENTITY state		☐ b. Applicant is no lon	ger claiming SMAL	LENT	TTY status. See 37 Cl	FR 1.27(g)(2).
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepted tes Patent and Trademark	d from anyone other than t Office.	he applicant; a regis	tered a	ttorney or agent; or th	ne assignee or other party in
Authorized Signature				Date			
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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



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#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

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GREENBLUM	& BERNSTEIN, P.L.	BRISTOL, LYNN ANNE			
1950 ROLAND C		ART UNIT	PAPER NUMBER		
RESTON, VA 20	191		1643		

DATE MAILED: 05/18/2010

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 43 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 43 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

## Application No. Applicant(s) 10/577,343 NISHIMURA ET AL. Notice of Allowability Examiner Art Unit LYNN BRISTOL 1643 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to the Response of 4/28/10. 2. The allowed claim(s) is/are 9-11 and 15. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) X All b) ☐ Some\* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. \( \overline{\text{Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. Examiner's Amendment/Comment Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material Other . /Lvnn Bristol/ Primary Examiner

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#### DETAILED ACTION

1. Claims 9-11 and 15 are all the pending claims in this application.

2. Claims 12-14 were cancelled, new Claim 15 was added and Claim 9 was

amended in the Response of 4/28/10.

3. Claims 9-11 and 15 are all the claims under examination.

# Withdrawal of Rejections

## Claim Rejections - 35 USC § 112, second paragraph

 The rejection of Claims 9-14 for failing to define the meaning of "a control value" against which the sample measurement is compared is withdrawn.

Applicants have amended Claim 9 to indicate that a control value is normal or healthy equivalent.

# Claim Rejections - 35 USC § 112, first paragraph

# Written Description/ New Matter

5. The rejection of Claims 12-14 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement because the claims are drawn to a GPC3 detection method where GPC3 mRNA or cDNA is detected in the body fluid for example a serum sample is withdrawn and moot for the cancelled claims.

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## Enablement

6. The rejection of Claims 9-11 under 35 U.S.C. 112, first paragraph, because the specification does not reasonably provide enablement for practicing a diagnostic method using any anti-GPC3 antibody directed to any epitope on the protein and in the absence additional art-recognized melanoma biomarkers is withdrawn.

Applicants have added new Claim 15 drawn to the characteristics of the antibody and the use of additionally clinically relevant biomarkers in the method assay. MPEP 806.04(d) states in part "In general, a generic claim should require no material element additional to those required by the species claims, and each of the species claims must require all the limitations of the generic claim." In other words, a generic claim embraces all species claims, thus the dependent claim elements are read into generic claim 9.

## Enablement

7. The rejection of Claims 12-14 under 35 U.S.C. 112, first paragraph, because the specification does not reasonably provide enablement for a diagnosing risk for malignant melanoma based on quantitating the GPC3 mRNA or cDNA much less in the absence of quantitating another art-recognized melanoma marker and that would allow a risk assessment of the subject to melanoma is withdrawn and moot for the cancelled claims.

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### Enablement

8. The rejection of Claims 12-14 under 35 U.S.C. 112, first paragraph, because the specification does not reasonably provide enablement for a detecting GPC3 mRNA in any sample including any fluid sample from a melanoma patient is withdrawn and moot for the cancelled claims.

## Examiner's Statement of Reasons for Allowance

9. The following is an examiner's statement of reasons for allowance: the use a glypican 3 (GPC3) as a tumor biomarker for detecting malignant melanoma in a subject sample with an antibody reagent is free from art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

- Claims 9-11 and 15 are allowed.
- 11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to LYNN BRISTOL whose telephone number is (571)272-6883. The examiner can normally be reached on 8:00-4:30, Monday through Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Larry Helms can be reached on 571-272-0832. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lynn A. Bristol/ Primary Examiner, Art Unit 1643